METRIC

MIL-PRF-24793A 27 December 2001 SUPERSEDING MIL-PRF-24793 1 June 1995

PERFORMANCE SPECIFICATION

ADHESIVE, UV CURABLE, ONE PART, FIBER OPTICS

This specification is approved for use by the Naval Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

 $1.1~\underline{\text{Scope}}$. This specification covers the requirements of a liquid adhesive for bonding optical fibers to glass fiber optic splice, connector, and terminus ferrules.

2. APPLICABLE DOCUMENTS

- 2.1 <u>General</u>. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.
- 2.2 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D542 - Standard Test Method for Index of Refraction of

Transparent Organic Plastics. (DoD adopted)

ASTM D570 - Standard Test Method for Water Absorption of Plastics.

(DoD adopted)

ASTM D696 - Standard Test Method for Coefficient of Linear Thermal

Expansion of Plastics Between -30°C and 30°C. (DoD

adopted)

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Department of the Navy, Naval Sea Systems Command, ATTN: SEA 05Q, 1333 Isaac Hull Avenue Southeast, Stop 5160, Washington Navy Yard, DC 20376-5160, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 6070

<u>DISTRIBUTION STATEMENT A</u>. Approved for public release; distribution is unlimited.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) - Continued

ASTM D1002	-	Standard Test Method for Strength Properties of Adhesives
		in Shear by Tension Loading (Metal to Metal). (DoD
		adopted)
ASTM D1084	_	Standard Test Method Viscosity of Adhesives. (DoD
		adopted)
ASTM D2240	-	Standard Test Method for Rubber Property - Durometer
		Hardness. (DoD adopted)
ASTM D2566	-	Standard Test Method for Linear Shrinkage of
		Thermosetting Casting Systems During Cure.

Standard Test Method for Transition Temperatures of

Polymers by Thermal Analysis. (DoD adopted)

(Application for copies should be addressed to American Society for Testing

ELECTRONIC INDUSTRIES ASSOCIATION/TELECOMMUNICATIONS INDUSTRY ASSOCIATION (EIA/TIA)

and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

TIA/EIA-455-5	-	Humidity Test Procedure for Fiber Optic Components.
		(DoD adopted)
TIA/EIA-455-71	-	Procedure to Measure Temperature-Shock Effects on
		Fiber Optic Components.

(Application for copies should be addressed to the Telecommunications Industry Association, 2500 Wilson Boulevard, Arlington, VA 22201.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for related associated specifications, specification sheets, or MS standards), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

ASTM D3418 -

- 3.1 <u>Acquisition requirements</u>. The individual item requirements shall be as specified herein and in accordance with the acquisition documents. In the event of any conflict between the requirements of this specification and the acquisition documents, the latter shall govern.
- 3.2 <u>First article</u>. When specified (see 6.2), a sample shall be subjected to first article inspection (see 6.3) in accordance with 4.4.
- 3.3 <u>Materials</u>. The cured adhesive material shall not produce toxic, corrosive, or explosive byproducts. All materials are subject to a toxicological data and formulations review and inspection, for safety of the material, by the Government.
- 3.3.1 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs.

- 3.4 <u>Composition</u>. The adhesive shall be a one component, liquid, adhesive. The adhesive shall be capable of being cured by exposure to ultraviolet (UV) electromagnetic radiation.
- 3.5 Performance requirements. The performance requirements shall be defined in terms of the mechanical, environmental, and chemical properties.
- 3.5.1 <u>Viscosity (see 4.6.1)</u>. The uncured adhesive viscosity shall be not less than 100 cp and not greater than 2,000 cp at $+25^{\circ}\text{C} \pm 5^{\circ}\text{C}$.
- 3.5.2 Shelf life (see 4.6.2). The uncured adhesive shall have a shelf life not less than 18 months at $+25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ (see 6.6). The 18-month period commences on the date of the adhesive manufacture. The uncured adhesive shall meet the requirements of 3.5.1. When cured in accordance with 3.5.4, the adhesive shall meet the requirements of 3.5.5, 3.5.6, and 3.5.7.
- 3.5.3 Storage temperature (see 4.6.2). The uncured adhesive shall be capable of storage at temperatures from -40°C to $+50^{\circ}\text{C}$. After storage, the uncured adhesive shall meet the requirements of 3.5.1. When cured in accordance with 3.5.4, the adhesive shall meet the requirements of 3.5.5, 3.5.6, and 3.5.7.
- 3.5.4 <u>Cure schedule (see 4.6.3)</u>. The adhesive shall meet the requirements of 3.5.5, 3.5.6, 3.5.7, 3.5.8, 3.5.10, 3.5.11, and 3.5.12 when exposed to UV radiation (radiant intensity \geq 0.006 W/cm²) for a time period sufficient to completely cure the bulk material sample. The adhesive shall meet the requirements of 3.5.15 when exposed to UV radiation with a radiant intensity of 0.003 W/cm² for 2 \pm 1 minutes at \pm 1.5°C.
- 3.5.5 Linear shrinkage (see 4.6.4). The adhesive shall have a linear shrinkage of not greater than 2 percent when cured in accordance with 3.5.4.
- 3.5.6 <u>Hardness (see 4.6.5)</u>. When cured in accordance with 3.5.4, the adhesive shall have a Shore D hardness not less than 65.
- 3.5.7 Bond strength (see 4.6.6). When cured in accordance with 3.5.4, the adhesive shall have a bond strength not less than 10.3 MPa (1,500 psi) at a temperature of $+25^{\circ}\text{C} \pm 5^{\circ}\text{C}$.
- 3.5.8 Glass transition temperature (see 4.6.7). When cured in accordance with 3.5.4, the adhesive shall have a glass transition temperature not less than $+65^{\circ}$ C.
- 3.5.9 Index of refraction (see 4.6.8). The adhesive shall have an index of refraction not less than 1.500.
- 3.5.10 <u>Coefficient of linear thermal expansion (see 4.6.9)</u>. When cured in accordance with 3.5.4, the adhesive shall have a coefficient of linear thermal expansion not greater than 225 x 10^{-6} mm/ $^{\circ}$ C.
- 3.5.11 Operating temperature (see 4.6.9). When cured in accordance with 3.5.4 and after exposure to non-operating temperature extremes between -40° C and $+70^{\circ}$ C, the adhesive shall meet the requirements of 3.5.10 when exposed to operating temperature extremes between -28° C and $+65^{\circ}$ C.

- 3.5.12 Water absorption (see 4.6.10). When cured in accordance with 3.5.4, the adhesive shall absorb an amount of water not greater than 0.5 percent of the adhesive weight.
- 3.5.13 <u>Identification and marking (see 4.6.11)</u>. All containers shall be marked. The markings shall be permanent, clearly visible, and legible. Marking information shall include the Part or Identifying Number (PIN), CAGE code, manufacturer's name, lot number, and date of manufacture.
- 3.5.14 Workmanship (see 4.6.12). All adhesive material shall be uniform in quality and free from foreign material or any defects detrimental to the fabrication or performance of the adhesive.
- 3.5.15 Splice compatibility (see 4.6.13). The adhesive shall securely hold an optical fiber within a fiber optic splice. The adhesive shall restrict the axial movement of the optical fiber with respect to the fiber optic splice ferrule to be less than \pm 0.2 μ m.
- 3.6 <u>Shipping</u>. Adhesive material shall not be shipped on any order to this specification if the shipping date is greater than 90 days from the manufacturing date.
- 3.7 <u>Particle diameter</u>. Diameters of particles within the adhesive material shall be not greater than 5 micrometers.

4. VERIFICATION

- 4.1 <u>General</u>. Material delivered to this specification shall meet all requirements herein. The manufacturer shall perform the necessary tests and inspections in order to insure compliance with this specification.
- 4.1.1 Test equipment and inspection facilities. Requirements for test equipment and inspection facilities shall be as identified in the contract (see 6.3.1).
- 4.2 <u>Classification of inspections</u>. The inspection requirements specified herein are classified as follows:
 - a. First contract inspection (see 4.3).
 - b. First article inspection (see 4.4).
 - c. Conformance inspection (see 4.5).
- 4.3 First contract inspection. First contract inspection (see 6.4.1) is applicable only on the first acquisition of a particular product under this specification. First contract inspections (see 6.4.1) shall consist of the tests listed in Table I and shall be conducted in conjunction with first article inspections (see 4.4). The material submitted for testing shall be representative of the production process.

TABLE I. First contract inspection.

Inspection	Requirement	Test	Sample size
Identification and marking	3.5.13	4.6.11	All units
Index of refraction	3.5.9	4.6.8	1/
Water absorption	3.5.12	4.6.10	<u>2</u> /
Splice compatibility	3.5.15	4.6.13	3 splice assemblies

- $\underline{1}/$ Three specimens shall be used from units selected at random from the first contract sample. The specimens shall be uncured.
- 2/ Three specimens shall be used from units selected at random from the first contract sample. The specimens shall have been cured in accordance with 3.5.4.
- 4.3.1 <u>Sample</u>. The sample submitted shall be a number of units of the same PIN sufficient to complete all of the inspections.
- 4.3.2 <u>Inspection routine</u>. The sample shall be subjected to the inspections specified in table I in the order shown. The tests identified in table I may be performed at the same time as the tests identified in table II.
- 4.3.3 <u>Failures</u>. One or more failures shall constitute first contract inspection failure.
- 4.4 <u>First article inspection</u>. First article inspection shall consist of all the tests listed in table II. The material submitted for testing shall be representative of the production process.

TABLE II. First article inspection.

Inspection	Requirement	Test	Sample size
Identification and marking	3.5.14	4.6.11	All units
Workmanship	3.5.14	4.6.12	All units
Viscosity	3.5.1	4.6.1	1/
Shelf life	3.5.2	4.6.2	<u>2</u> /
Storage temperature	3.5.3	4.6.2	<u>3</u> /
Cure schedule	3.5.4	4.6.3	<u>4</u> /
Linear shrinkage	3.5.5	4.6.4	<u>5</u> /
Hardness	3.5.6	4.6.5	<u>5</u> /
Bond strength	3.5.7	4.6.6	<u>5</u> /
Glass transition temperature	3.5.8	4.6.7	<u>5</u> /
Coefficient of linear thermal expansion	3.5.10	4.6.9	<u>5</u> /
Operating temperature	3.5.11	4.6.9	<u>6</u> /

- $\underline{1}/$ Three specimens shall be used from units selected at random from the first article sample.
 - $\underline{2}/$ Twelve specimens shall be used from units selected at random from the first article sample.
 - $\underline{\mathbf{3}}/$ The same specimens shall be used as are used in the shelf life inspection.
 - $\underline{4}/$ Fifteen specimens shall be used from units selected at random from the first article sample.
 - $\underline{5}/$ Three specimens shall be used selected from the specimens used in the cure schedule inspection.
 - $\underline{6}/$ The same specimens shall be used as are used in the coefficient of linear thermal expansion inspection.
- 4.4.1 <u>Sample</u>. The sample submitted shall be a number of units of the same PIN sufficient to complete all of the inspections.
- 4.4.2 <u>Inspection routine</u>. The sample shall be subjected to the inspections specified in table II in the order shown.

- 4.4.3 <u>Failures</u>. One or more failures shall constitute first article inspection failure.
- 4.5 Conformance inspection. Conformance inspection shall consist of the inspections and tests specified for group A inspection (table III), Group B inspection (table IV), and Group C inspection (table V), as specified (see 6.2). Requirements for alternate forms of conformance inspection shall be as identified in the contract (see 6.3.2).
- 4.5.1 <u>Group A inspection</u>. Group A inspection shall consist of the tests listed in table III conducted in the order shown.

TABLE III. Group A inspection.

Inspection	Requirement	Test
Identification and marking	3.5.13	4.6.11

- 4.5.1.1 <u>Sampling plan</u>. Group A inspections shall be performed on 100 percent of the product supplied under this specification.
- 4.5.1.2 <u>Failures.</u> One or more failures shall constitute group A inspection failure of the sample unit.
- 4.5.1.3 <u>Disposition of sample units</u>. Samples that have failed group A inspection shall not be shipped or submitted for group B testing.
- 4.5.2 <u>Group B inspection</u>. Group B inspection shall consist of the tests listed in table IV conducted in the order shown. Group B inspections shall be made on sample units that have passed group A inspection.

TABLE IV. Group B inspection.

Inspection	Requirement	Test
Workmanship	3.5.15	4.6.12
Cure schedule	3.5.4	4.6.3
Hardness	3.5.6	4.6.5
Bond strength	3.5.7	4.6.6

- 4.5.2.1 <u>Sampling plan</u>. A minimum of three sample units shall be selected from each lot of material supplied under this specification.
- 4.5.2.2 <u>Failures.</u> One or more failures shall constitute group B inspection failure of the lot.
- 4.5.2.3 Rejected lots. Requirements regarding the rework of rejected lots shall be as identified in the contract (see 6.8.1).
- 4.5.2.4 <u>Disposition of sample units</u>. Samples that have failed group B inspection shall not be shipped or submitted for group C testing.

- 4.5.3 <u>Periodic inspection</u>. Periodic inspection shall consist of group C inspection. Except where the results of these inspections show noncompliance with the applicable test requirements (see 4.5.3.1.4), delivery of products that have passed group B shall not be delayed pending the results of these first article verification inspections.
- 4.5.3.1 <u>Group C inspection</u>. Group C inspection shall consist of the inspections specified in table V in the order shown. Group C inspections shall be made on units that have passed the group B inspection.
- 4.5.3.1.1 <u>Sampling plan</u>. Every 60 months, a number of units of the same PIN, sufficient to complete all of the inspections, which have passed group B inspection shall be selected.
- 4.5.3.1.2 <u>Failures</u>. One or more specimen or sample unit failures shall constitute group C inspection failure.

Inspection	Requirement	Test
Viscosity	3.5.1	4.6.1
Shelf life	3.5.2	4.6.2
Storage temperature	3.5.3	4.6.2
Linear shrinkage	3.5.5	4.6.4
Glass transition temperature	3.5.8	4.6.7
Coefficient of linear thermal expansion	3.5.10	4.6.9
Operating temperature	3.5.11	4.6.9

TABLE V. Group C inspection.

- 4.5.3.1.3 <u>Disposition of sample units</u>. Sample units that have been submitted to group C inspection shall not be shipped.
- 4.5.3.1.4 <u>Noncompliance</u>. Requirements regarding failure of group C inspection shall be as identified in the contract (see 6.8.2).
 - 4.6 Methods of Inspection.
- 4.6.1 <u>Viscosity (see 3.5.1)</u>. The uncured adhesive shall be tested, using a viscometer, in accordance with ASTM D 1084 using spindle #2 at a speed of 20 revolutions per minute (rpm) or equivalent.
- 4.6.2 Accelerated shelf life/storage temperature (see 3.5.2 and 3.5.3). The uncured adhesive shall be exposed to a temperature of $+50^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for 120 hrs. After exposure part of adhesive shall be subjected to the test specified in 4.6.1. The remainder shall be cured in accordance with 3.5.4, and subjected to the tests specified in 4.6.4, 4.6.5, and 4.6.6.

- 4.6.3 <u>Cure schedule (see 3.5.4)</u>. The adhesive shall be cured in accordance with 3.5.4. The quantities of adhesive cured shall be as required to complete the tests specified in 4.6.4, 4.6.5, 4.6.6, 4.6.7, 4.6.9, and 4.6.10. During cure the adhesive shall be subjected to the test specified in 4.6.4. The cured adhesive shall be subjected to the tests specified in 4.6.4, 4.6.5, 4.6.6, 4.6.7, 4.6.9, and 4.6.10.
- 4.6.4 <u>Linear shrinkage (see 3.5.5)</u>. The adhesive shall be tested in accordance with ASTM D2566 or equivalent.
- 4.6.5 Hardness (see 3.5.6). A 24 gm slab of cured adhesive shall be tested in accordance with ASTM D2240.
- 4.6.6 <u>Bond strength (see 3.5.7)</u>. The cured adhesive shall be tested in accordance with ASTM D1002 using glass plates. The glass plates shall be cleaned with alcohol or acetone prior to application of the adhesive.
- 4.6.7 Glass transition temperature (see 3.5.8). The cured adhesive shall be tested in accordance with ASTM D3418 using a differential scanning calorimeter, or equivalent.
- 4.6.8 Index of refraction (see 3.5.9). The adhesive shall be tested in accordance with ASTM D542 or equivalent.
- 4.6.9 Coefficient of linear thermal expansion (see 3.5.10 and 3.5.11). The cured adhesive shall initially be soaked at both -40° C and $+70^{\circ}$ C for one hour. The cured adhesive shall then be tested in accordance with ASTM D696 or equivalent. The test shall be performed at 11 approximately equally spaced temperatures spanning the operating temperature range specified in 3.5.11.
- 4.6.10 Water absorption (see 3.5.12). The cured adhesive shall be tested for 24 hours in accordance with ASTM D570 or equivalent.
- 4.6.11 <u>Identification and marking (see 3.5.13)</u>. The adhesive containers shall be visually examined for conformance with the requirements of 3.5.13.
- 4.6.12 Workmanship (see 3.5.14). The adhesive components shall be visually examined for conformance with the requirements of 3.5.14.
- 4.6.13 Splice compatibility (see 3.5.15). The adhesive shall be used in the assembly of a $62.5/125/900~\mu m$ optical fiber into a glass ferrule mechanical fiber splice. The splice shall be assembled in accordance with the manufacturer's instructions, except that the adhesive shall be cured in accordance with 3.5.4 and the splice shall not be attached to the 900 μm fiber using mechanical methods. Note: Finely polished splice faces will allow more accurate fiber position measurements (see 4.6.13.1 and 4.6.13.3). The splice assembly shall be exposed to the tests specified in 4.6.13.1, 4.6.13.2, and 4.6.13.3 in the order shown.
- 4.6.13.1 <u>Thermal shock</u>. The splice assembly shall be tested in accordance with TIA/EIA-455-71 using test condition C-0. The high and low temperature extremes shall be -40° C and $+70^{\circ}$ C, respectively. Before the test, the splice assembly shall be examined for fiber position using a profilometer or an optical interferometer.
 - 4.6.13.2 Temperature/humidity cycling. The splice assembly shall be tested

in accordance with ${\tt TIA/EIA-455-5}$ method B. The subcycle shall be included in the test.

- 4.6.13.3 <u>Fiber pull out</u>. The splice assembly shall be tested by applying a tensile force of 14.0 N (3.1 pounds) on the 900 μ m fiber for one minute. After the test the splice assembly shall be examined for fiber position using a profilometer or an optical interferometer.
- 4.6.14 Particle diameter (see 3.7). The contractor shall demonstrate conformance with the requirements of 3.7. Filtering of the adhesive material through a 5-micron absolute filter during the manufacturing process is one method of demonstrating conformance with the requirements.

5. PACKAGING

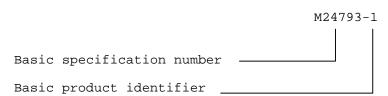
5.1 <u>Packaging</u>. For acquisition purposes, the packaging requirements shall be as specified in the contract or purchase order (see 6.2). When actual packaging of material is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

- 6.1 <u>Intended use</u>. The adhesive covered by this specification is intended for use with fiber optic splices or connectors in fixed plant, tactical, and shipboard applications.
- 6.2 <u>Acquisition requirements</u>. Acquisition documents must specify the following:
 - a. Title, number, and date of this specification.
 - b. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of the individual documents referenced (see 2.1).
 - c. Type of adhesive packaging required (1 liter HDPE containers or polypropylene syringes with 4.0 grams of adhesive).
 - d. Data required (material certifications and chemical certifications).
 - e. Requirements for test and inspection facilities (see 6.3.1).
 - f. Requirements for alternate forms of conformance testing (see 6.3.2).
 - g. Requirements regarding rework of rejected lots (see 6.8.1).
 - h. Requirements regarding failure of group C inspection (see 6.8.2).
 - i. Is Material Safety Data Sheet required? (See 6.7)
- 6.3 <u>First article</u>. When first article inspection is required, the items should be a first article sample. The first article should consist of a

minimum of 4 units. The contracting officer should also include specific instructions in acquisition documents regarding arrangements for examinations, approval of first article test results, and disposition of first articles. Invitations for bids should provide that the Government reserves the right to waive the requirement for samples for first article inspection to those bidders offering a product which has been previously acquired or tested by the Government, and that bidders offering such products, who wish to rely on such production or test, must furnish evidence with the bid that prior Government approval is presently appropriate for the pending contract. Unless specifically requested to do so in the solicitation, bidders should not submit alternate bids.

- 6.3.1 Test equipment and inspection facilities. Provision for test measuring equipment and inspection facilities of sufficient accuracy, quality, and quantity to permit performance of the required inspections must be the responsibility of the contractor. The establishment and maintenance of a calibration system to control the accuracy of the measuring and test equipment must be in accordance with ANSI/NCSL Z540-1.
- 6.3.2 <u>Alternate forms of conformance inspection.</u> Requests for alternate forms of conformance inspection must be submitted to the contracting officer. Alternate forms of quality conformance inspection may be used upon written approval by the contracting officer.
- 6.4 <u>Definitions</u>. Definitions of terms shall be in accordance with TIA/EIA-440 and the following:
- 6.4.1 <u>First contract</u>. The first contract is considered to be the first contract under which a manufacturer's material is supplied to any acquiring activity under this specification.
- 6.4.2 First contract inspection. First contract inspections are inspections required in addition to first article inspections for the first contract in which this specification is invoked. First contract inspections are intended to evaluate basic material properties that are primarily a function of the product formulation, not the product manufacturing process.
 - 6.5 PIN. The PIN for this adhesive should contain the following:



6.6 <u>Shelf life</u>. Products acquired to this specification should not be used for fiber optic termination purposes under any conditions if the date of manufacture has passed by more than 18 months. If products acquired to this specification are exposed to temperatures higher than the temperatures specified in 3.5.2, the shelf life may be decreased and the manufacturer should be contacted to determine the appropriate shelf life under the actual storage conditions. If products acquired to this specification are exposed to temperatures lower than the temperatures specified in 3.5.2, the shelf life may be increased and the manufacturer should be contacted to determine the

appropriate shelf life under the actual storage conditions. Storage conditions should never exceed the temperature specified in 4.6.2.

- 6.7 <u>MSDSs</u>. The adhesive covered by this specification contains material(s) which may be hazardous to personnel and a Material Safety Data Sheet (MSDS) is needed for employee safety programs. Contracting officers will identify those activities requiring copies of completed MSDSs prepared in accordance with FED-STD-313. In order to obtain the MSDS, FAR clause 52.223-3 must be in the contract.
 - 6.8 Conformance inspection.
- 6.8.1 <u>Rejected lots.</u> If a group B inspection lot is rejected, the contractor may rework it to correct the defects, or screen out the defective units (if applicable), and resubmit the lot for inspection.
- 6.8.2 Noncompliance. If a sample fails to pass group C inspection, the contractor must notify the contracting activity of the failure and take corrective action on the materials and processes, or both, as warranted, and on all units of product which can be corrected and which were manufactured under essentially the same conditions, with essentially the same materials, processes, and which are considered subject to the same failure. Acceptance of the product will be discontinued until corrective action, acceptable to the contracting activity, has been taken. After the corrective action has been taken, group C inspection must be repeated on additional sample units (all inspection tests or the inspection test which the original sample failed, at the option of the contracting activity). Group A and group B inspections may be reinstituted; however, final acceptance will be withheld until the group C inspection has shown that the corrective action was successful.
- 6.9 <u>Safety</u>. This material may contain as much as 8 percent acrylic acid. Use with adequate ventilation, safety glasses, and protective handwear. Acrylic acid is a severe skin, eye, and respiratory irritant. Good industrial and personal hygiene practices must be followed, especially for women of childbearing age who may come into contact with the material. For skin contact, wash thoroughly with soap and water. For eye contact, flush with large amounts of water and contact a physician.
 - 6.10 Subject term (key word) listing.

Fiber optic connectors Fiber optic adhesive Acrylate

Custodians:
Army - CR
Navy - SH
Air Force - 11
NASA - NA
Review activities:

Army - MI, SC Navy - AS, Air Force - 02, 13, 19, 33, 93, 99 DLA - CC Preparing activity: Navy - SH

Agent: DLA - CC

(Project 6070-0004)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

- 1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
- 2. The submitter of this form must complete blocks 4, 5, 6, and 7.
- 3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to

amend contractual requirements.				
I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER MIL-PRF-24793A	2. DOCUMENT DATE (YYMMDD)		
3. DOCUMENT TITLE ADHESIVE, UV CURABLE, ONE PAR	RT, FIBER OPTICS			
4. NATURE OF CHANGE (Identify paragraphics)	oh number and include proposed rewrite, if po	ossible. Attach extra sheets as needed.)		
5				
5. REASON FOR RECOMMENDATION				
6. SUBMITTER				
a. NAME (Last, First, Middle initial)	b. ORGANIZATION			
c. ADDRESS (Include Zip Code)	d. TELEPHONE (Include Area Code)	7. DATE SUBMITTED (YYMMDD)		
	(1) Commercial	(, , , , , , , , , , , , , , , , , , ,		
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8. PREPARING ACTIVITY				
a. NAME Ruth Butler	b. TELEPHONE (Include Area Code) (1) Commercial (2) AUTOVON (202) 781-3726 326-3726			
E. ADDRESS (Include Zip Code) Commander, Naval Sea Systems Command ATTN: SEA 05Q 333 Isaac Hull Avenue SE, Stop 5160 Vashington Navy Yard, DC 20376-5160 IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Standardization Program Office (DLSC-LM) 8725 John J. Kingman Road, Suite 2533 Fort Belvoir, Virginia 22060-6221 Telephone (703) 767-6888 DSN 427-6888				
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